

IN THE CLAIMS:

Claims 2-5, 11, 13-15, 20, 21, 23-25, and 30 have been previously cancelled, new claims 31-41 have been previously added, and claims 1, 6-10, 12, 16-19, 22, and 26-29 have been previously amended as follows:

1. (Currently Amended) A method for dissipating heat from a localized area within a semiconductor die, the method comprising:

providing a semiconductor die constructed and arranged to ~~have~~ include at least one conduit portion ~~therein~~, at least a portion of the conduit portion being proximate to the localized area, the conduit portion being at least partially filled with a heat-dissipating material;

absorbing, by the conduit portion, heat from the localized area; and

dissipating, by the conduit portion, at least a portion of the heat away from the localized area.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The method of claim 1, wherein the heat-dissipating material comprises a thermally conductive material ~~having high conductivity~~.

7. (Currently Amended) The method of claim 6, wherein the dissipating includes spreading heat by the thermally conductive material ~~having high conductivity~~.

8. (Currently Amended) The method of claim 6, wherein the thermally conductive material ~~having high conductivity~~ comprises copper.

9. (Currently Amended) The method of claim 6, wherein the thermally conductive material ~~having high conductivity~~ comprises silver.

10. (Currently Amended) The method of claim 1, wherein the localized area is proximate to a floating point ~~mechanism~~ unit in the die.

11. (Cancelled)

12. (Currently Amended) ~~An arrangement for dissipating heat from a localized area within a~~ A semiconductor die ~~[[,]]~~ comprising;

~~a semiconductor die having~~ at least one conduit ~~portion~~, at least a first portion of the conduit ~~portion~~ being proximate to ~~[[the]]~~ a localized area, and a second portion of the conduit having an end portion at a face of the die; and

a heat-dissipating material at least partially filling the conduit ~~portion~~, wherein the conduit ~~portion~~ is constructed and arranged to absorb heat from the localized area and to dissipate at least a portion of the heat away from the localized area.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ is substantially filled with the heat-dissipating material.

17. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 16, wherein the heat-dissipating material comprises a thermally conductive material ~~having high conductivity~~.

18. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 17, wherein the thermally conductive material ~~having high conductivity~~ comprises copper.

19. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 17, wherein the thermally conductive material having high conductivity comprises silver.
20. (Cancelled)
21. (Cancelled)
22. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ is cylindrical.
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ [[has]] includes a hole ~~therein~~.
27. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ [[has]] includes a channel ~~therein~~.
28. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ [[has]] includes a via ~~therein~~.
29. (Currently Amended) The ~~arrangement~~ semiconductor die of claim 12, wherein the conduit ~~portion~~ [[has]] includes a slot ~~therein~~.
30. (Cancelled)
31. (New) A semiconductor die comprising;
- a microprocessor circuit;
- at least one conduit, a first portion of the conduit being proximate to the microprocessor circuit, and a second portion of the conduit having an end portion at a face of the die; and

a heat-dissipating material at least partially filling the conduit, wherein the conduit is constructed and arranged to absorb heat from the microprocessor circuit and to dissipate at least a portion of the heat away from the microprocessor circuit.

32. (New) The semiconductor die of claim 31, wherein the conduit is substantially filled with the heat-dissipating material.

33. (New) The semiconductor die of claim 32, wherein the heat-dissipating material comprises a thermally conductive material.

34. (New) The semiconductor die of claim 33, wherein the thermally conductive material comprises copper.

35. (New) The semiconductor die of claim 33, wherein the thermally conductive material comprises silver.

36. (New) The semiconductor die of claim 31, wherein the conduit is cylindrical.

37. (New) The semiconductor die of claim 31, wherein the conduit includes a hole.

38. (New) The semiconductor die of claim 31, wherein the conduit includes a channel.

39. (New) The semiconductor die of claim 31, wherein the conduit includes a via.

40. (New) The semiconductor die of claim 31, wherein the conduit includes a slot.

41. (New) The semiconductor die of claim 31, the first portion of the conduit being proximate to a floating point unit in the microprocessor circuit.